

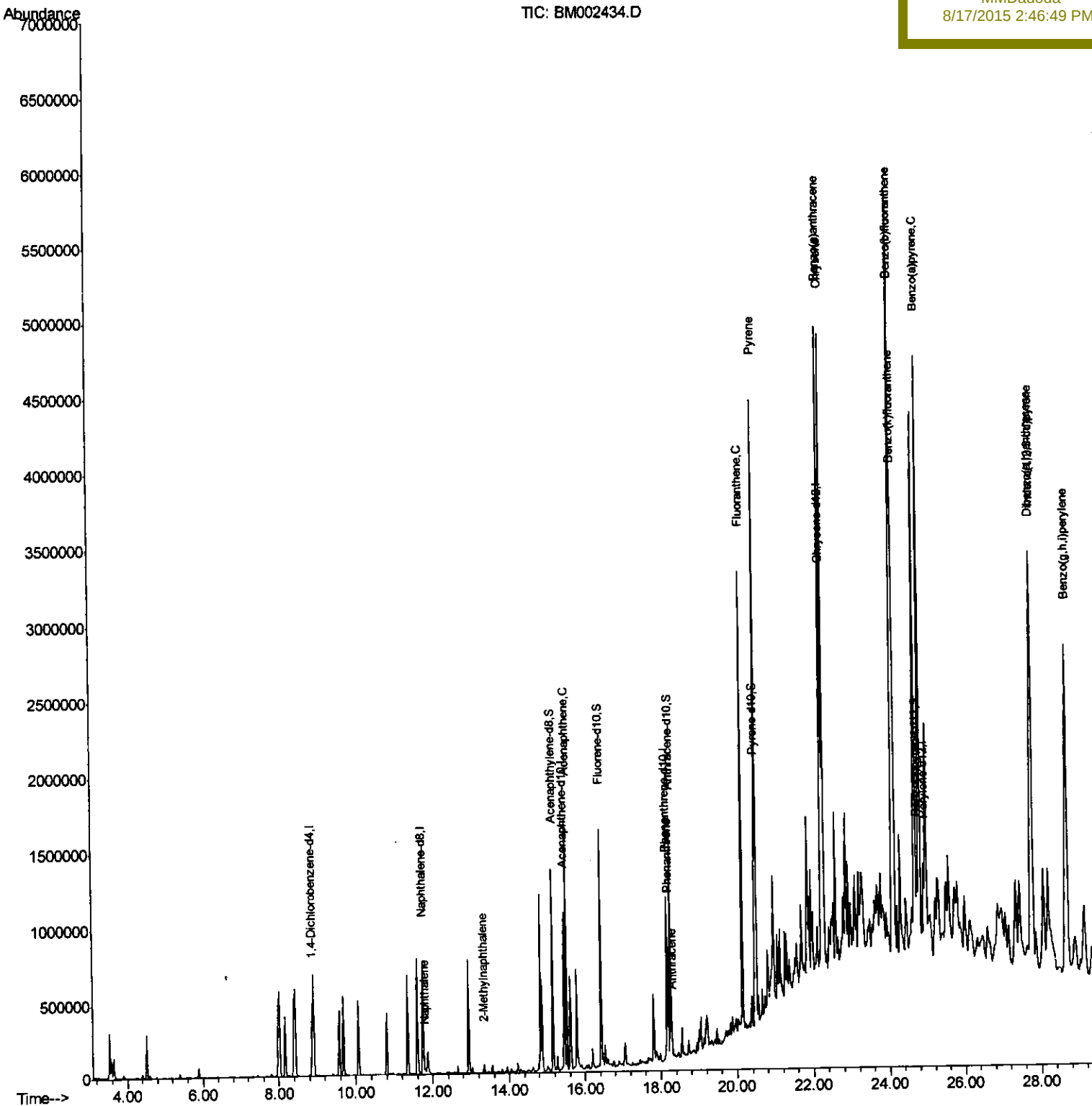
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002434.D
Acq On : 15 Aug 2015 20:50
Operator : UM/IZ
Sample : G3219-13MSD
Misc :
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:04:33 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MSD

Manual Integrations

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8/17/2015 2:46:49 PM

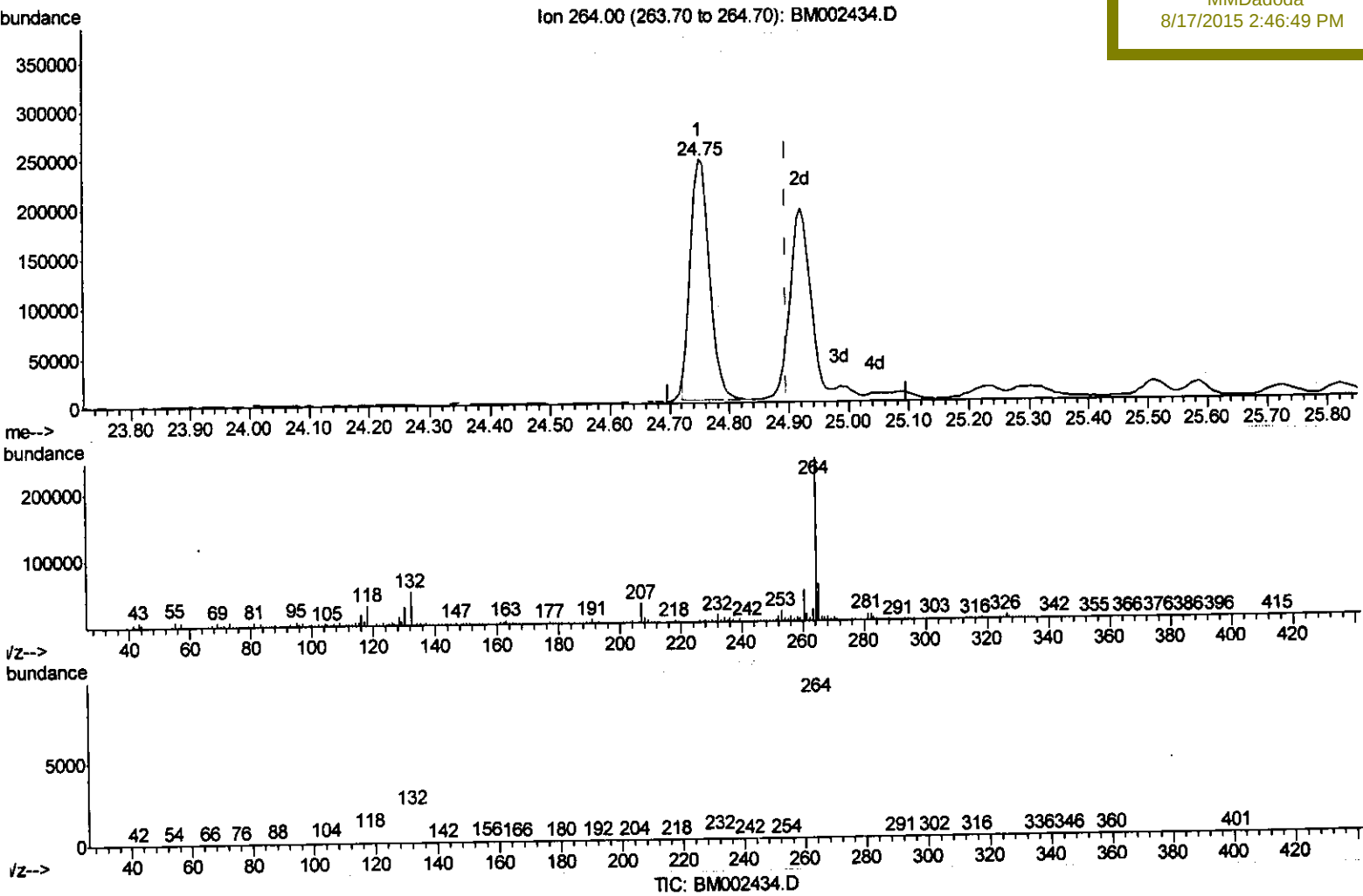


Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002434.D
Acq On : 15 Aug 2015 20:50
Operator : UM/IZ
Sample : G3219-13MSD
Misc :
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 05:18:18 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MSD

Manual Integrations
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8/17/2015 2:46:49 PM



(22) Perylene-d12 (I)

24.750min (-0.147) 20.00ng/ul

response 544646

Ion	Exp%	Act%
264.00	100	100
260.00	23.60	19.03
265.00	21.40	22.88
0.00	0.00	0.00

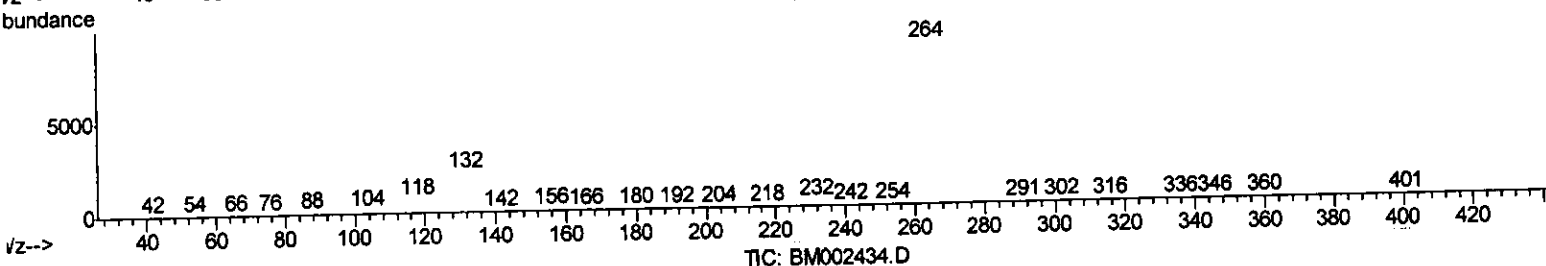
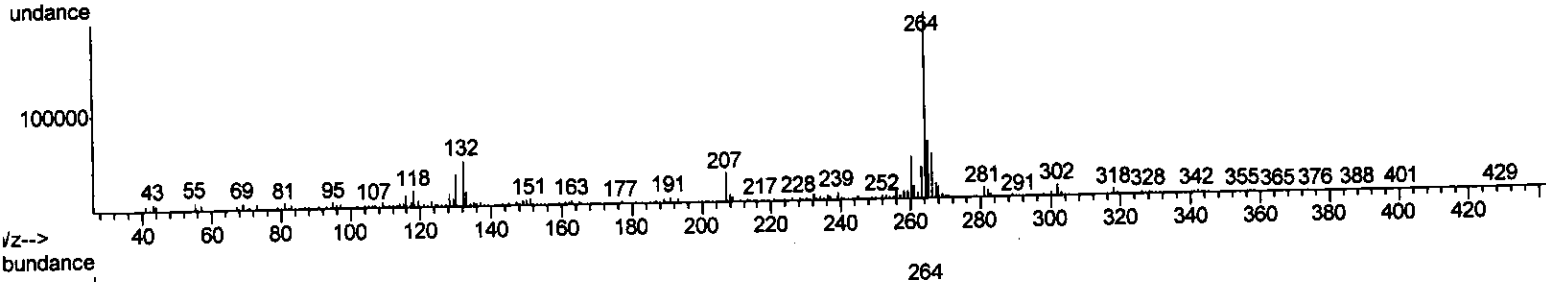
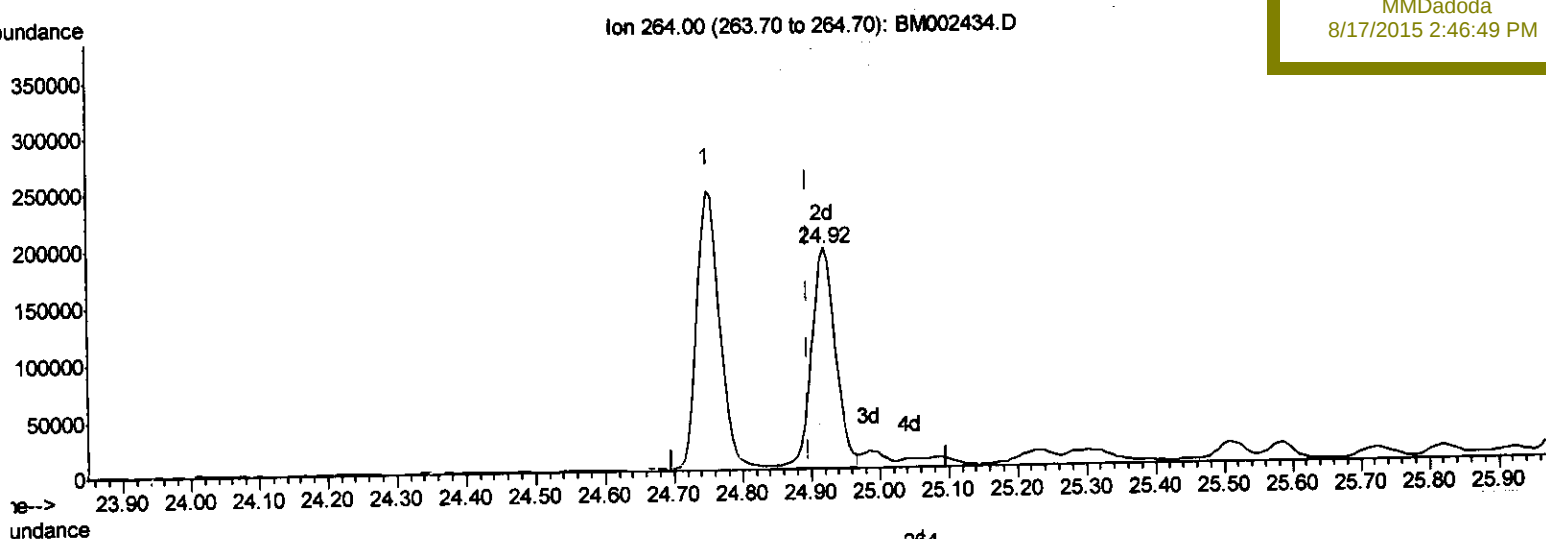
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 05:18:18 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integrations
 APPROVED

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 8/17/2015 2:46:49 PM



(22) Perylene-d12 (I)

24.921min (+0.023) 20.00ng/ul m > U.M.
 08/18/15

response 480208

Ion	Exp%	Act%
264.00	100	100
260.00	23.60	22.98
265.00	21.40	31.05#
0.00	0.00	0.00

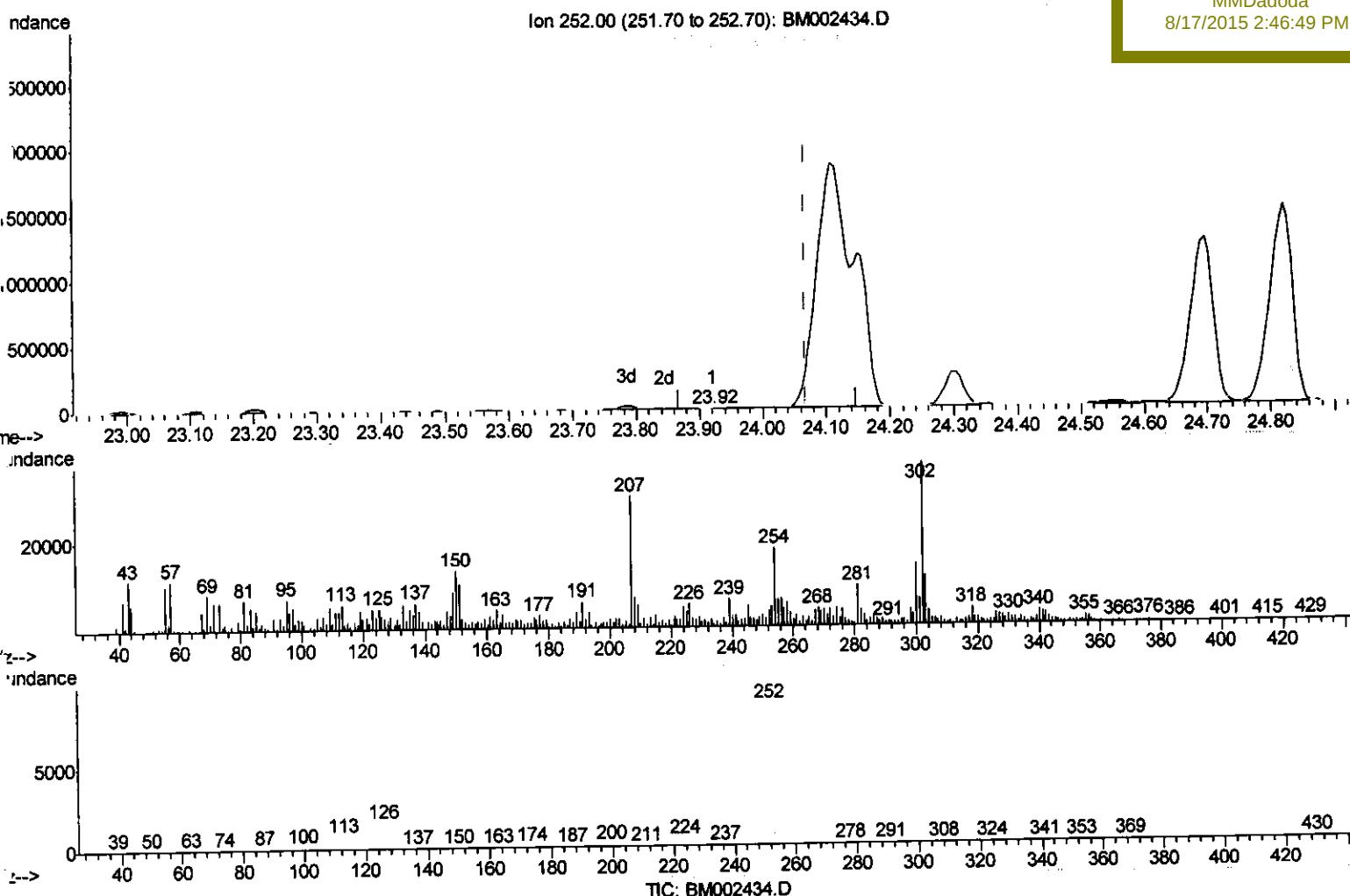
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integrations
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 8/17/2015 2:46:49 PM



(23) Benzo(b)fluoranthene

23.921min (-0.147) 0.01ng/ul

response 150

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	126.44#
125.00	12.50	126.83#
0.00	0.00	0.00

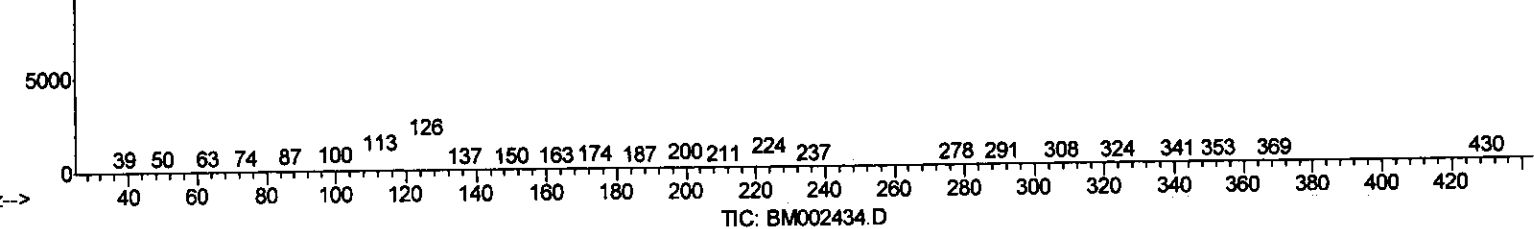
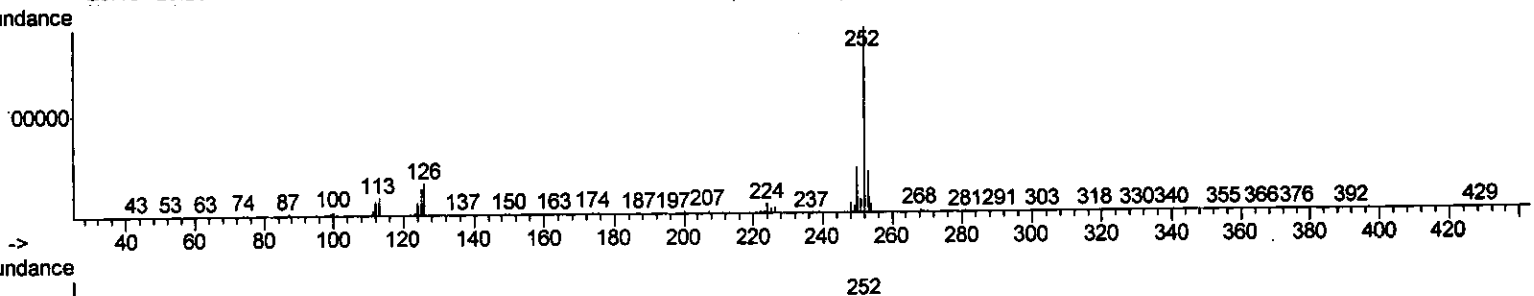
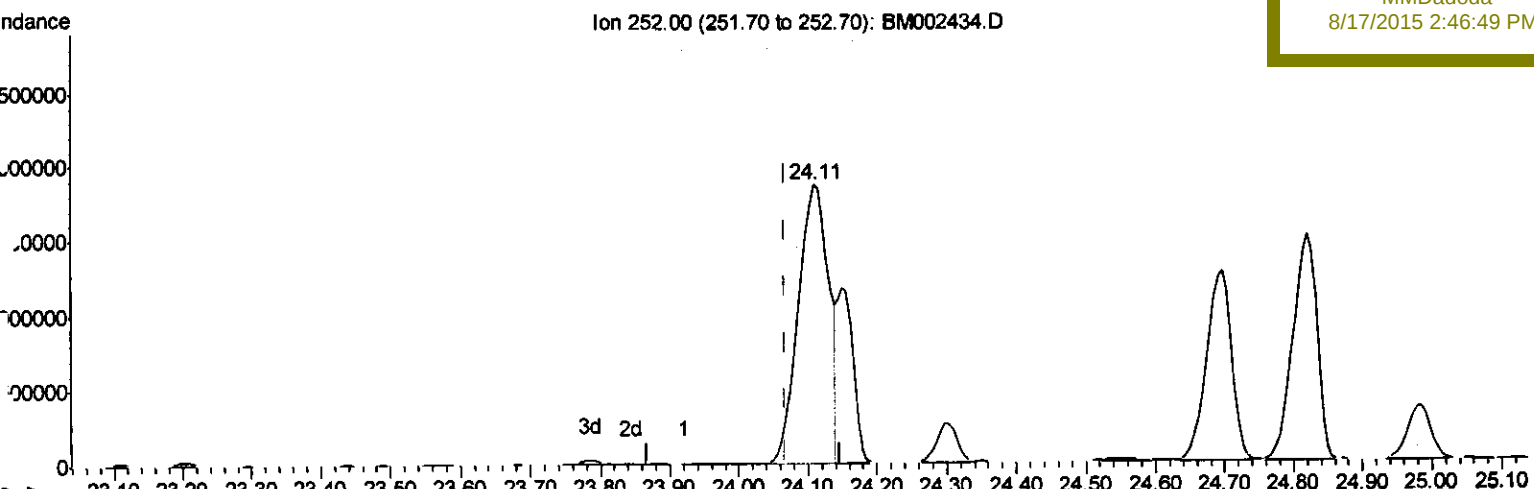
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 Client Sample ID :
 D9DA4MSD

Manual Integration
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 8/17/2015 2:46:49 PM



(23) Benzo(b)fluoranthene

24.109min (+0.041) 198.49ng/ul m

U.M.
 08/18/15

response 5762241

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.89
125.00	12.50	14.24
0.00	0.00	0.00

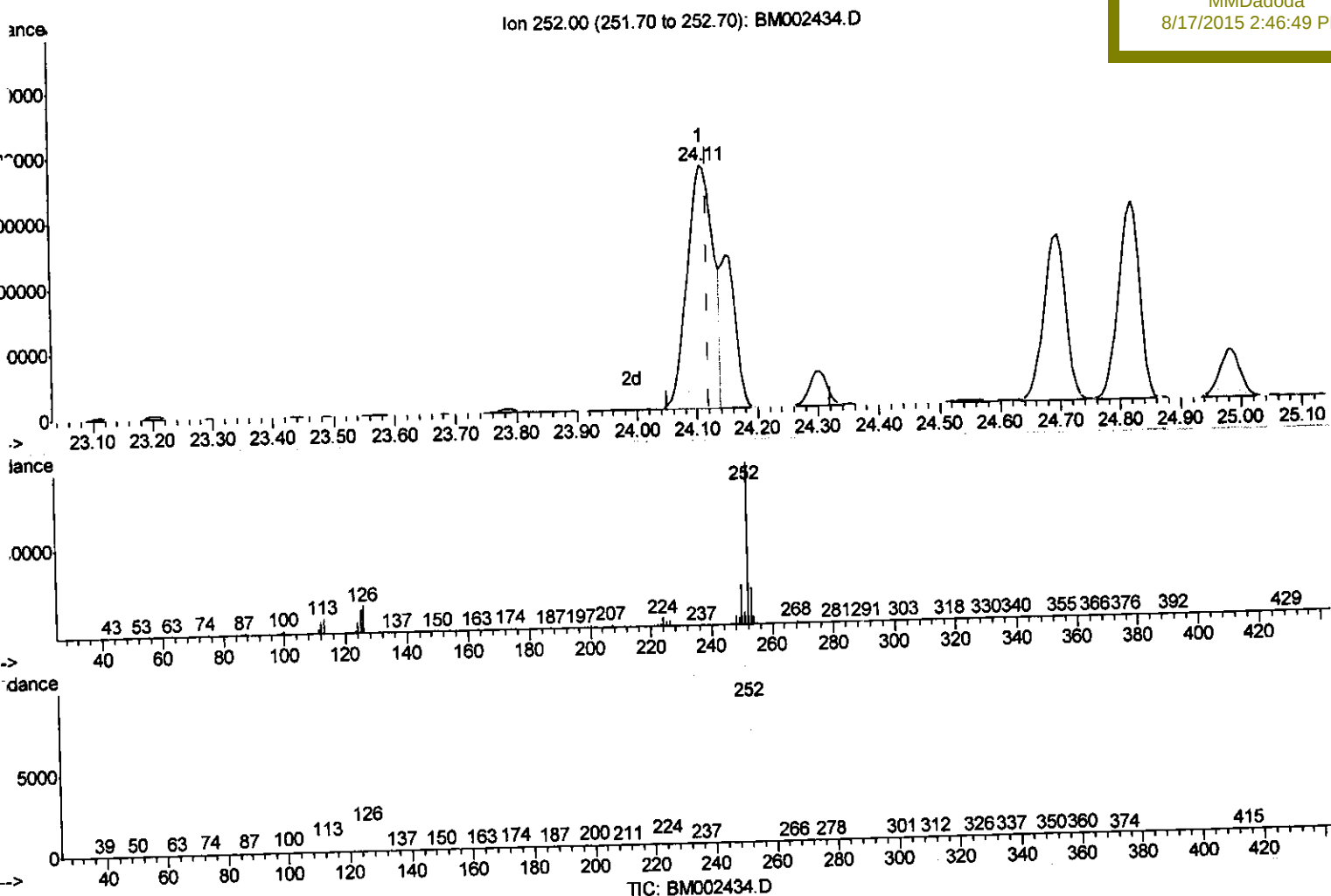
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Log On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 vial :
 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 Client Sample ID :
 D9DA4MSD

Manual Integration
 APPROVED

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 8/17/2015 2:46:49 PM



(24) Benzo(k)fluoranthene

24.109min (-0.012) 208.54ng/ul

response 5737363

Ion	Exp%	Act%
252.00	100	100
253.00	22.20	22.89
125.00	12.30	14.24
0.00	0.00	0.00

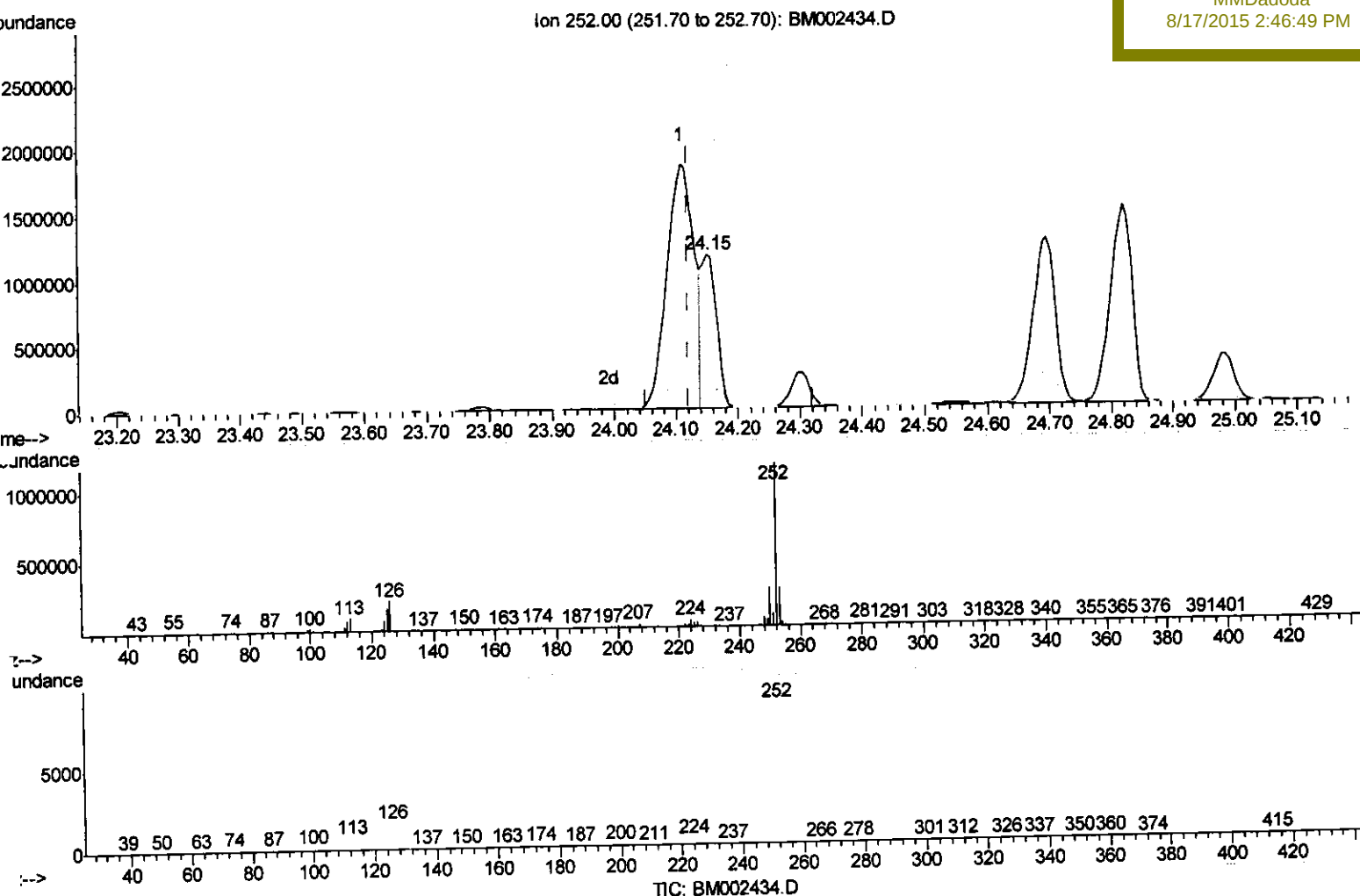
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampled :
 D9DA4MSD

Manual Integrations
 APPROVED

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(24) Benzo(k)fluoranthene

24.150min (+0.029) 68.95ng/ul m

response 1896786

Ion	Exp%	Act%
252.00	100	100
253.00	22.20	23.14
125.00	12.30	13.41
0.00	0.00	0.00

U.M.
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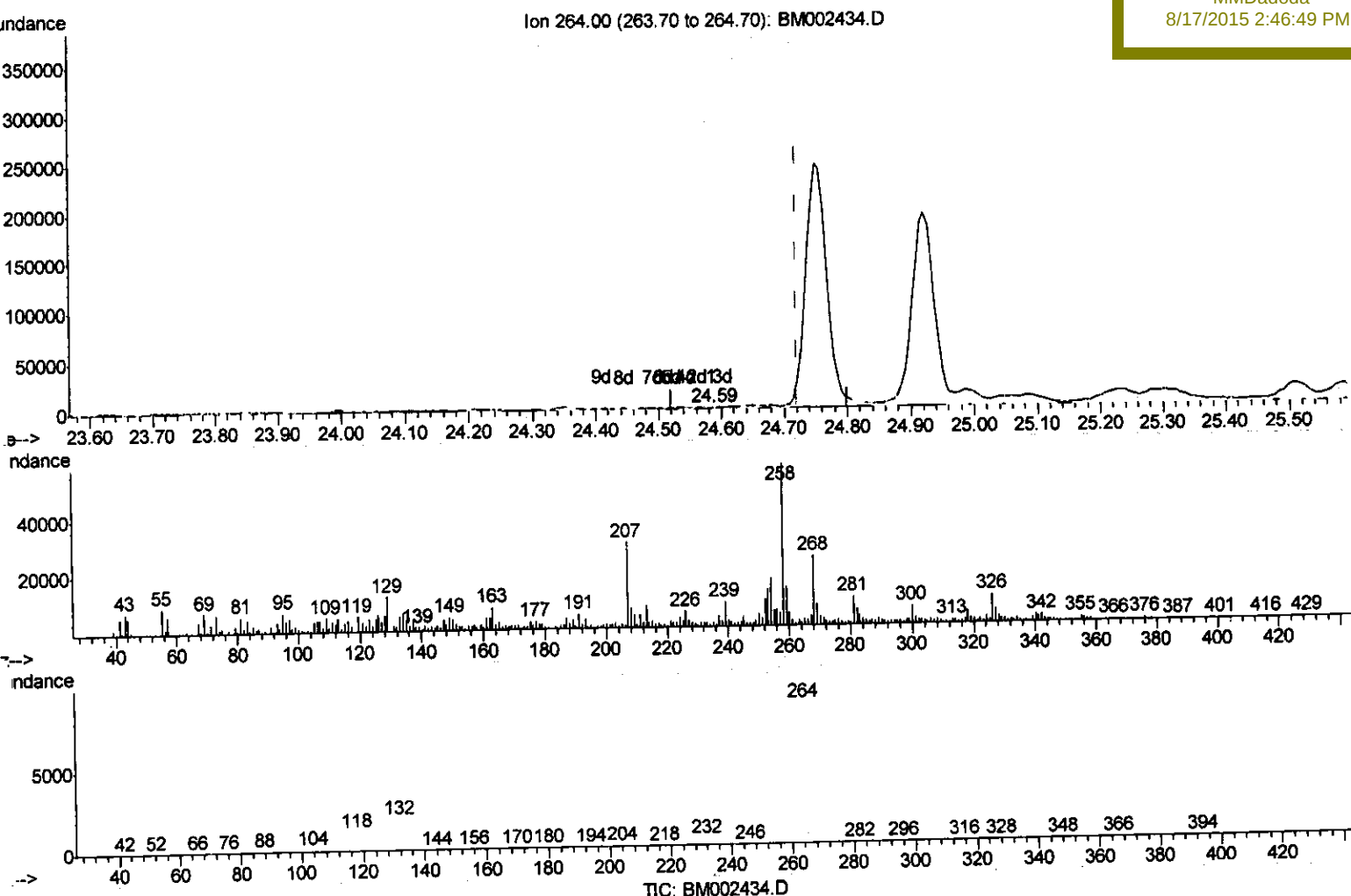
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integrations
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 8/17/2015 2:46:49 PM



(25) Benzo(a)pyrene-d12 (S)

24.585min (-0.135) 0.01ng/ul

response 265

Ion	Exp%	Act%
264.00	100	100
132.00	20.40	130.60#
118.00	11.60	0.00#
0.00	0.00	0.00

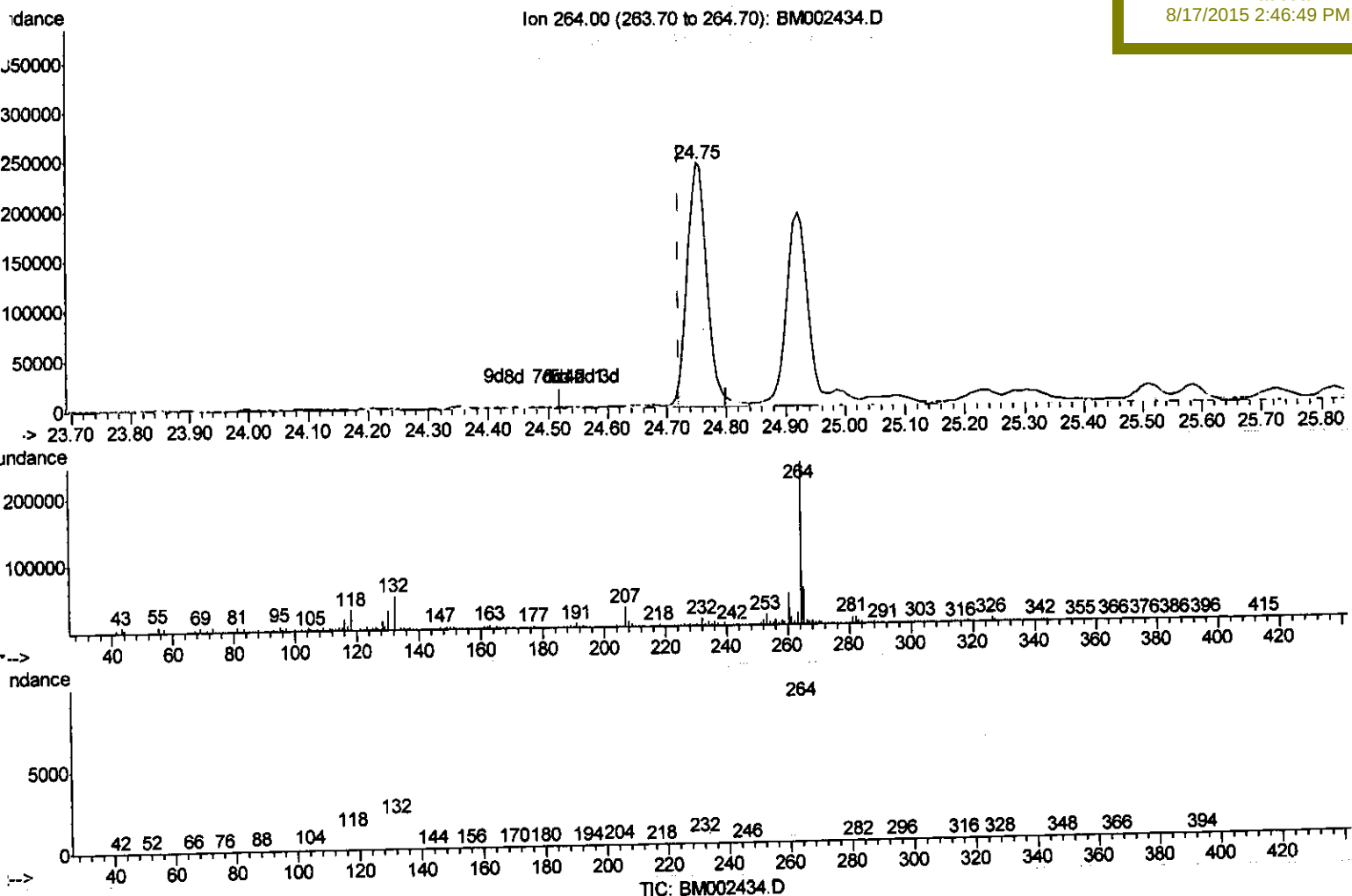
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integrations
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 8/17/2015 2:46:49 PM



(25) Benzo(a)pyrene-d12 (S)

24.750min (+0.029) 22.86ng/ul m

response 576576

Ion	Exp%	Act%
264.00	100	100
132.00	20.40	20.56
118.00	11.60	12.22
0.00	0.00	0.00

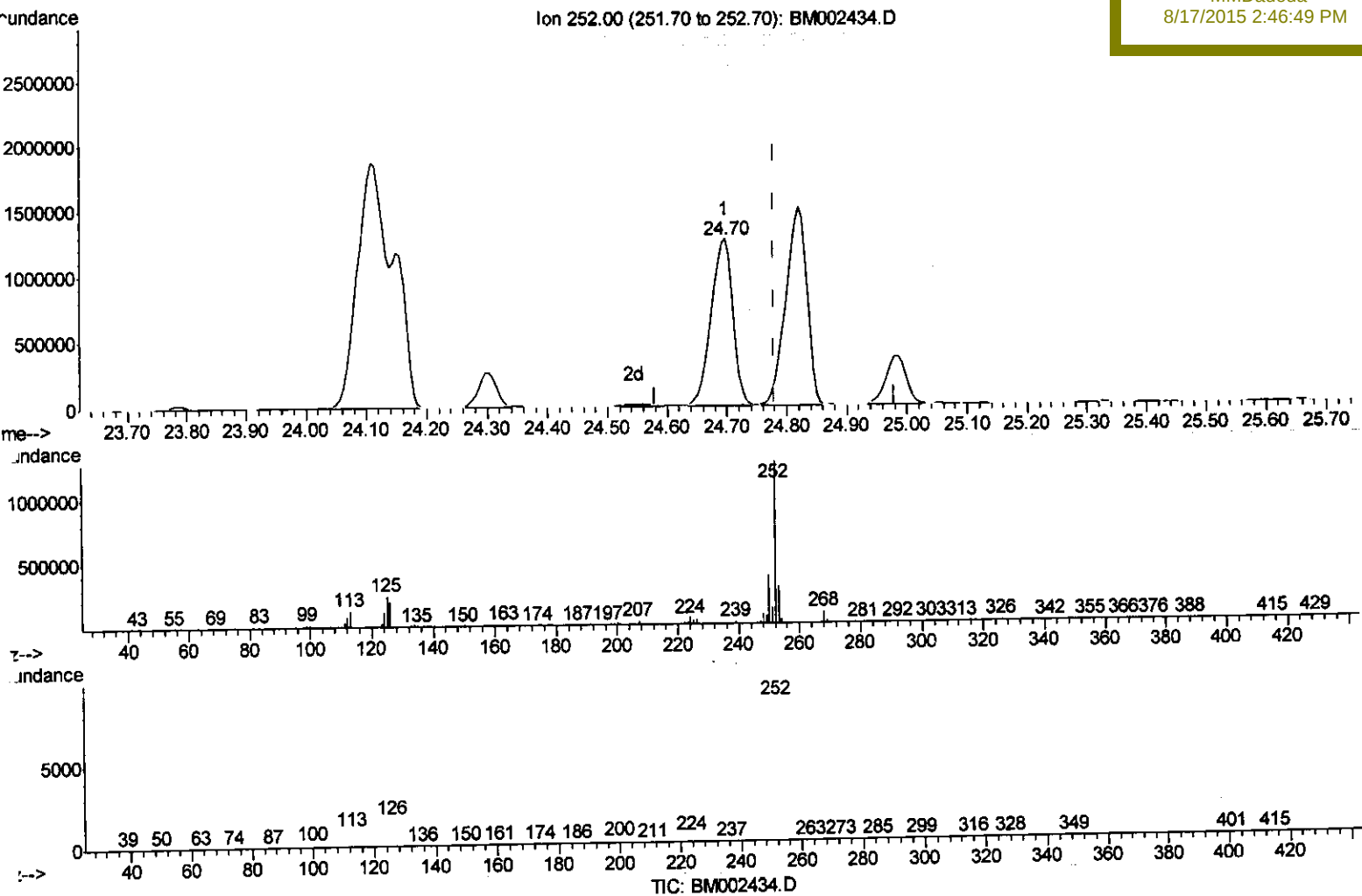
U.M.
 08/18/15

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002434.D
Acq On : 15 Aug 2015 20:50
Operator : UM/IZ
Sample : G3219-13MSD
Misc :
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MSD

Manual Integrations
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8/17/2015 2:46:49 PM



(26) Benzo(a)pyrene (C)
24.697min (-0.082) 115.90ng/ul
response 3213745

Ion	Exp%	Act%
252.00	100	100
253.00	22.00	22.45
125.00	13.40	18.81#
0.00	0.00	0.00

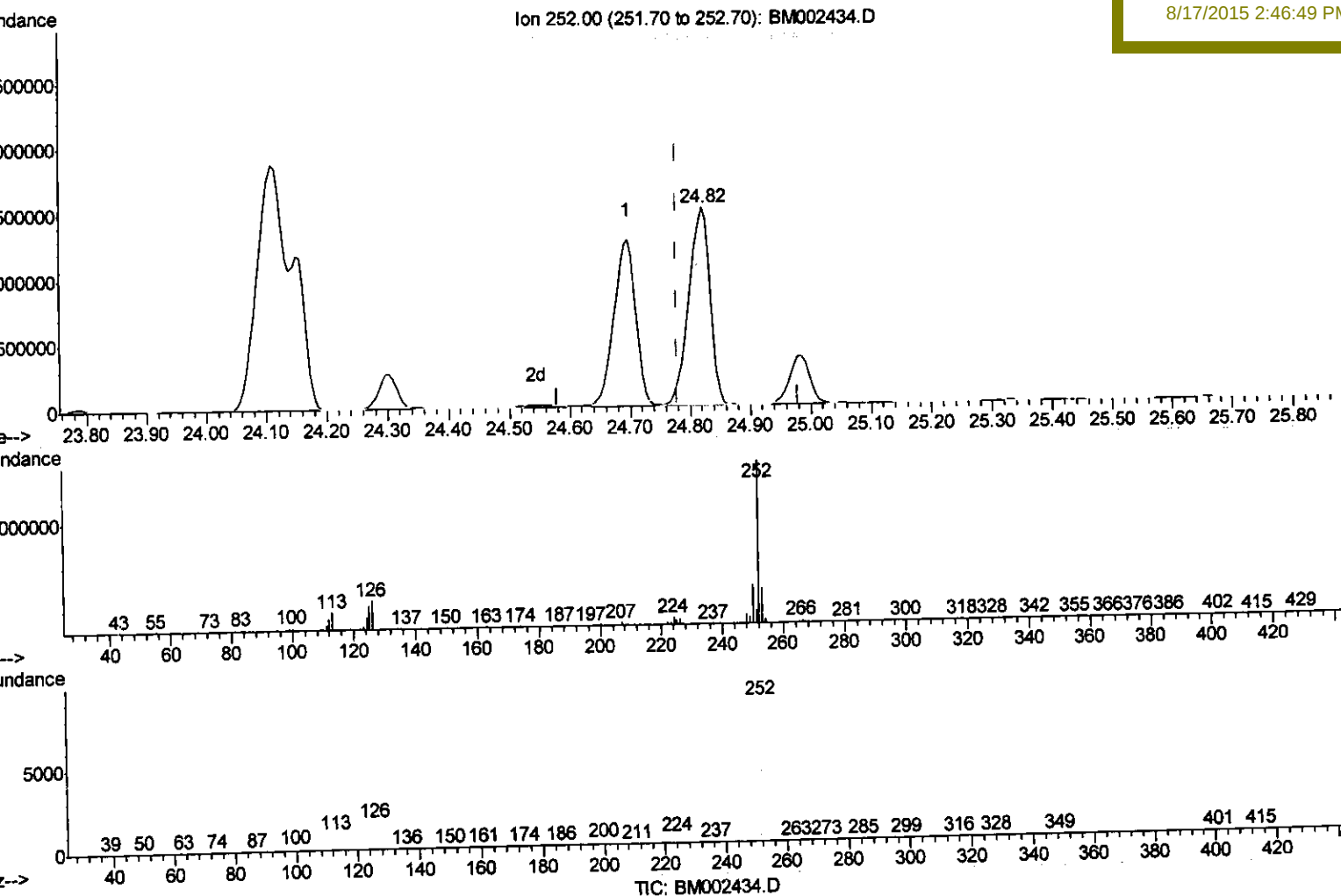
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integration
 APPROVED

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 8/17/2015 2:46:49 PM



(26) Benzo(a)pyrene (C)

24.821min (+0.041) 135.17ng/ul m

response 3748033

Ion	Exp%	Act%
252.00	100	100
253.00	22.00	22.25
125.00	13.40	14.32
0.00	0.00	0.00

U.M.
 08/18/15

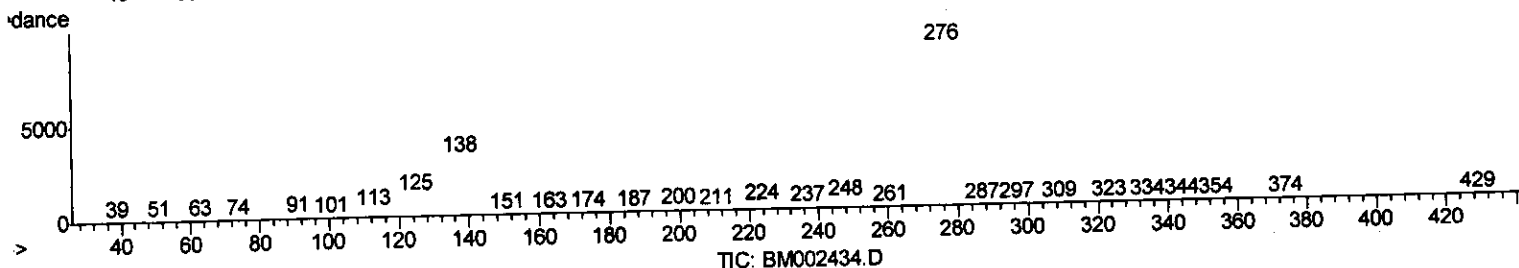
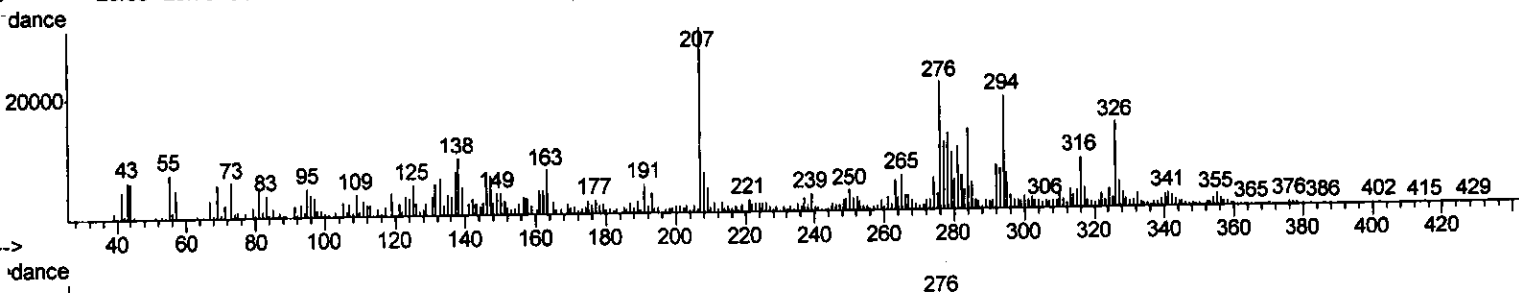
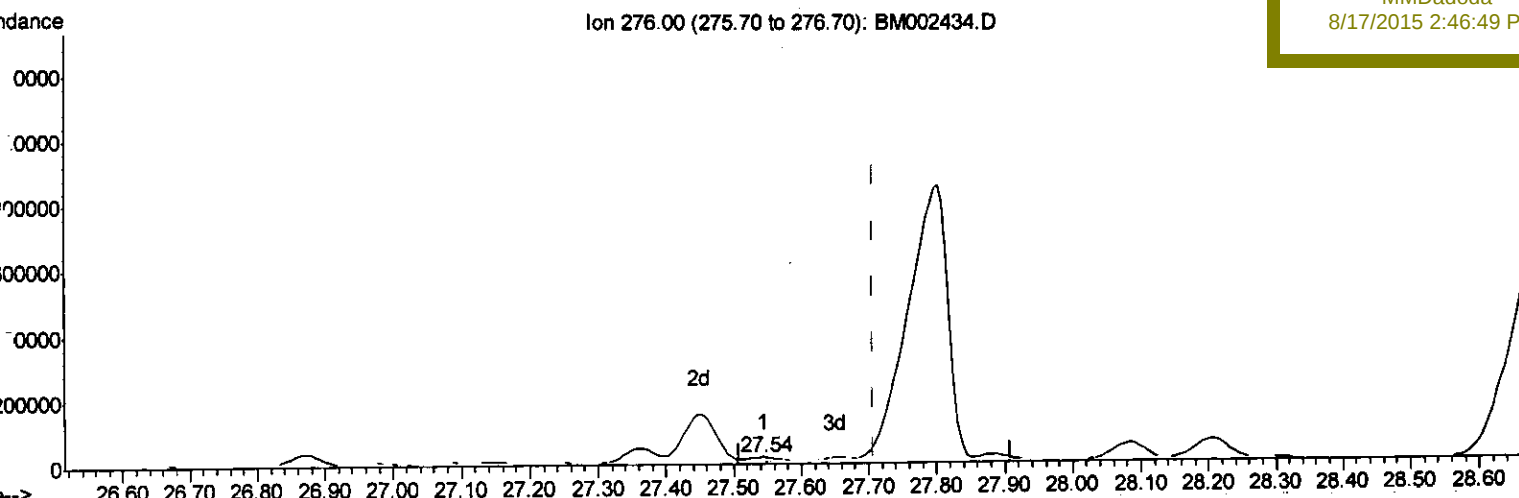
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Disc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 Client Sample Id :
 D9DA4MSD

Manual Integration
 APPROVED

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 8/17/2015 2:46:49 PM



(27) Indeno(1,2,3-cd)pyrene

27.544min (-0.165) 1.25ng/ul

response 40002

Ion	Exp%	Act%
276.00	100	100
138.00	31.60	44.93#
277.00	25.20	54.19#
0.00	0.00	0.00

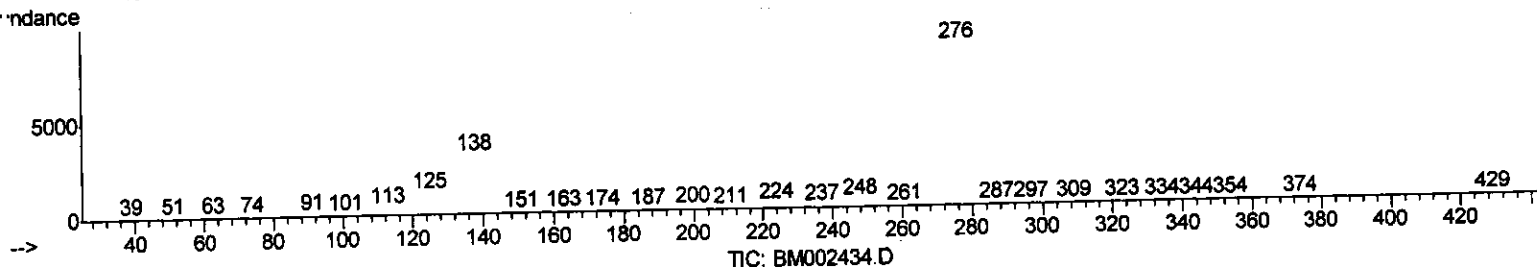
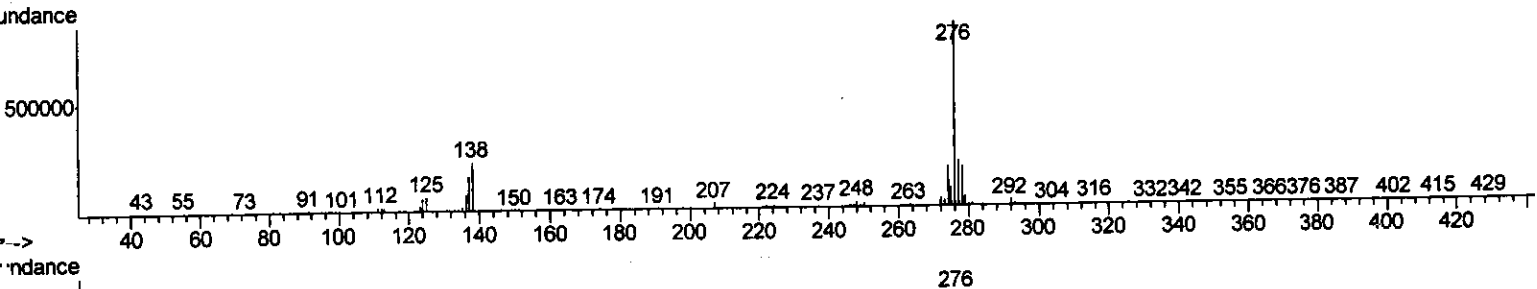
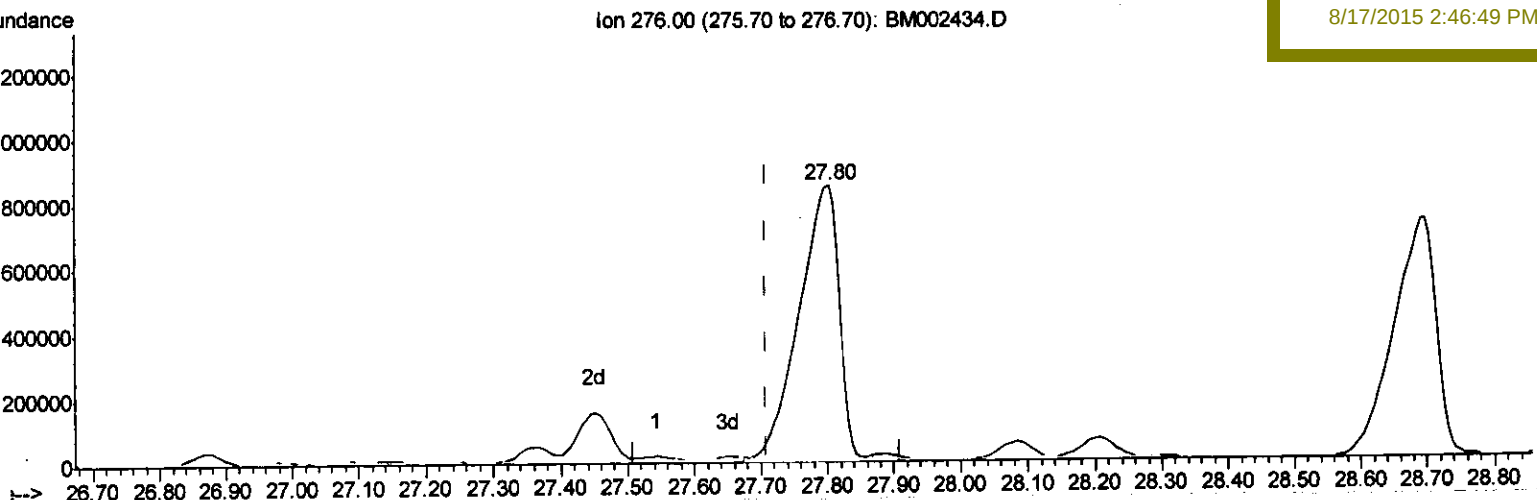
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integrations
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 8/17/2015 2:46:49 PM



(27) Indeno(1,2,3-cd)pyrene

27.803min (+0.094) 111.85ng/ul m

U.M.
 08/18/15

response 3566856

Ion	Exp%	Act%
276.00	100	100
138.00	31.60	26.29
277.00	25.20	24.55
0.00	0.00	0.00

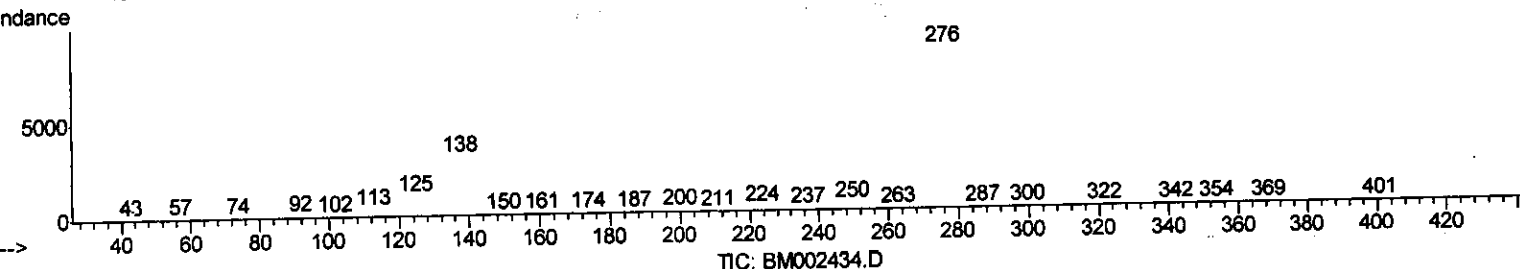
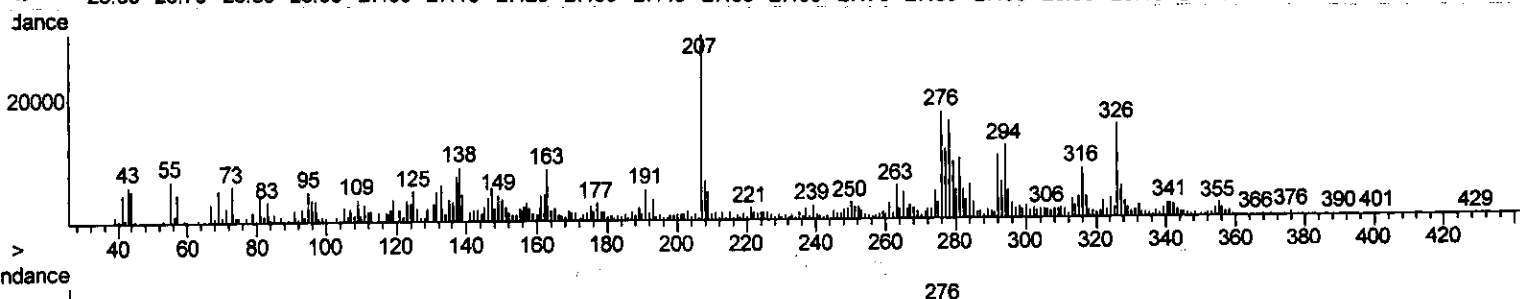
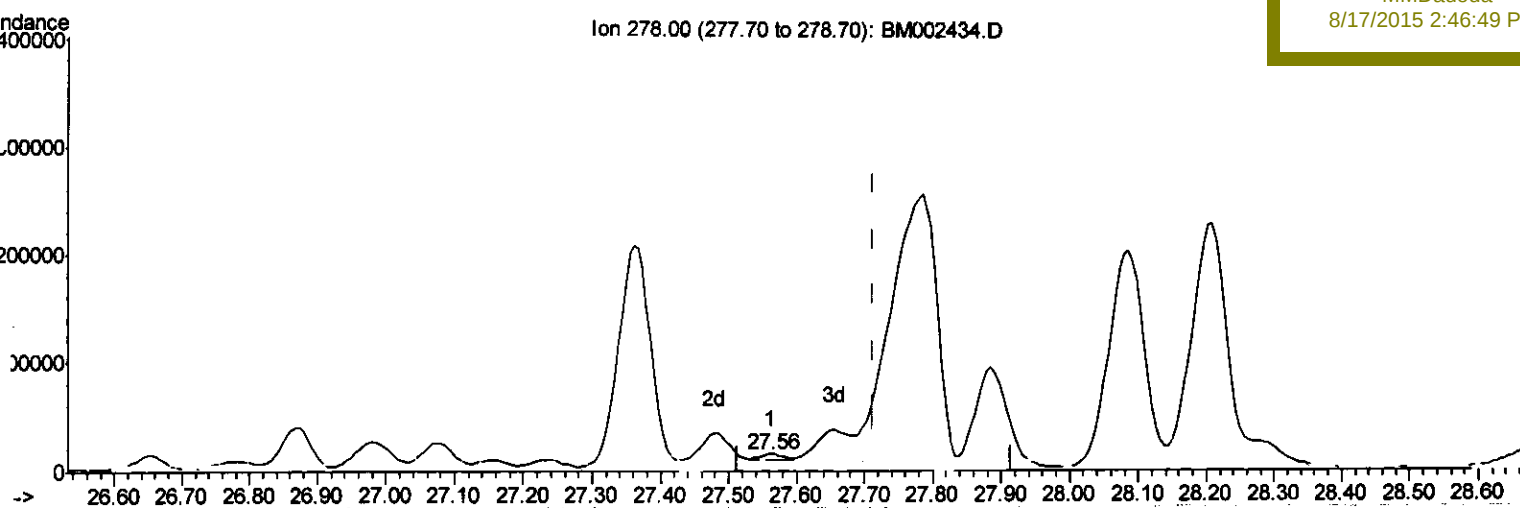
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Disc :
 ALS Vial : 40 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integration
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 8/17/2015 2:46:49 PM

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration



(28) Dibenzo(a,h)anthracene

27.562min (-0.153) 0.45ng/ul

response 11973

Ion	Exp%	Act%
278.00	100	100
139.00	20.60	28.53#
279.00	23.50	59.20#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Acq On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

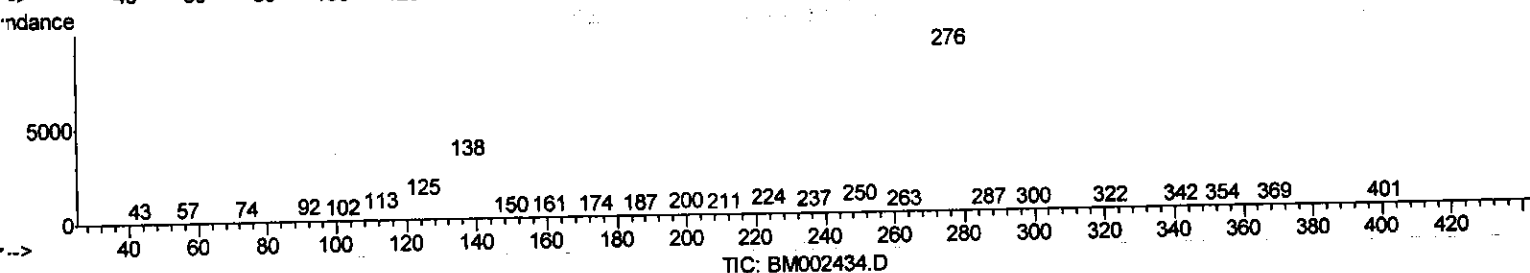
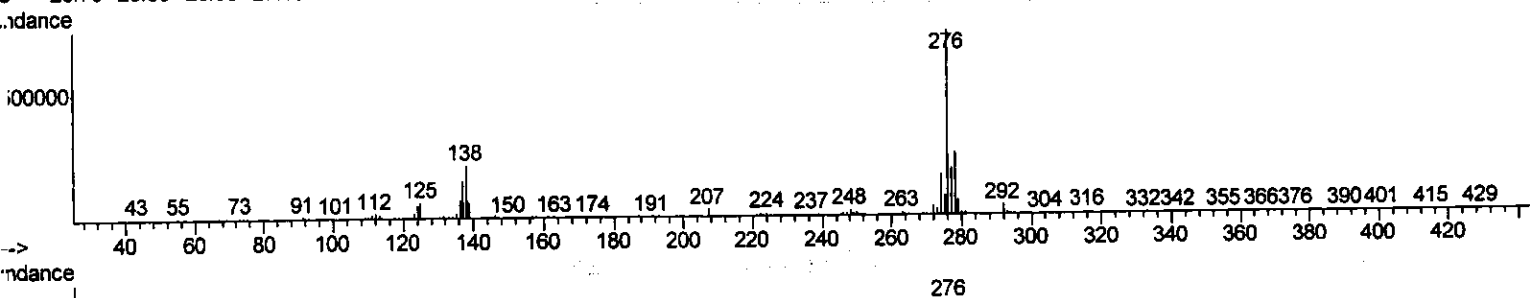
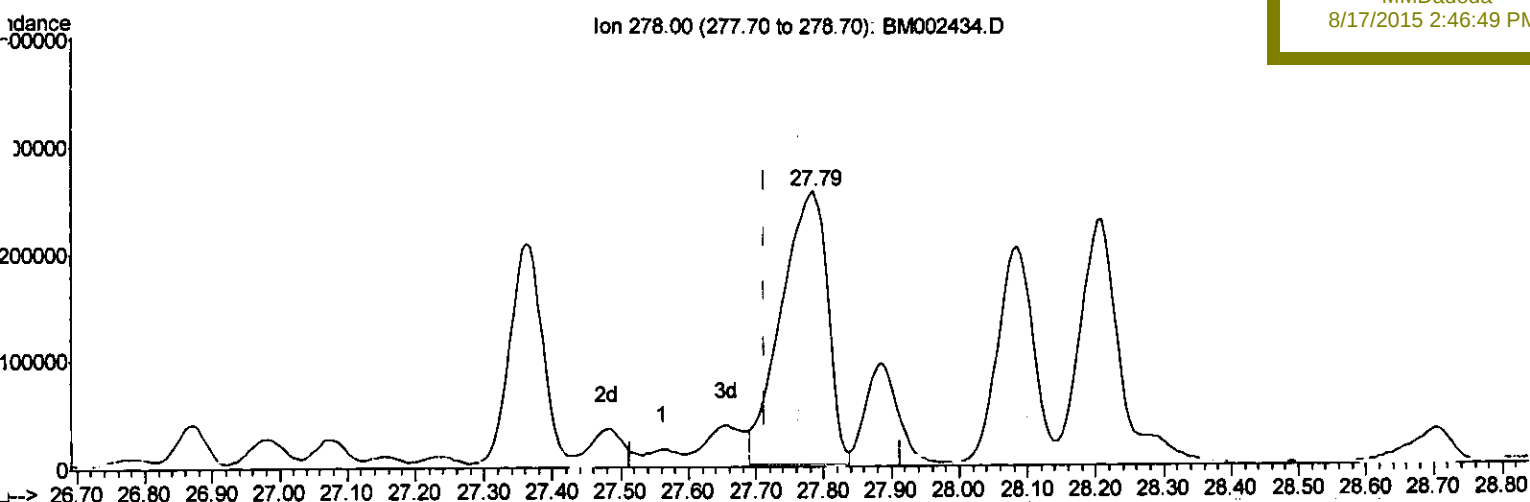
D9DA4MSD

Manual Integration

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 8/17/2015 2:46:49 PM

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration



(28) Dibenzo(a,h)anthracene

27.785min (+0.070) 45.67ng/ul m

response 1217305

Ion	Exp%	Act%
278.00	100	100
139.00	20.60	24.57
279.00	23.50	24.74
0.00	0.00	0.00

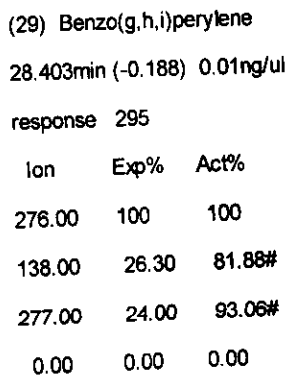
U.M.
 08/18/15

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Print Time: Aug 17 06:00:22 2015
Print Method : Z:\HPCHEM1\BNA\METHODS\SOM02.2-EPA-BM081415MA.M
Print Title : SVOA CALIBRATION
Last Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

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8/17/2015 2:46:49 PM



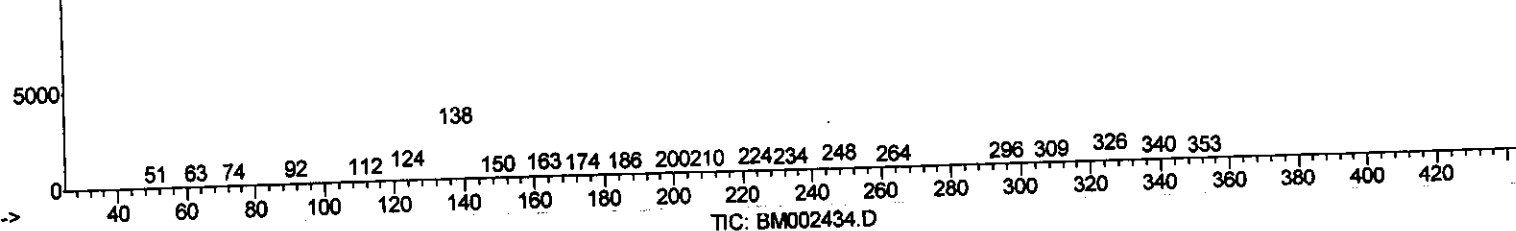
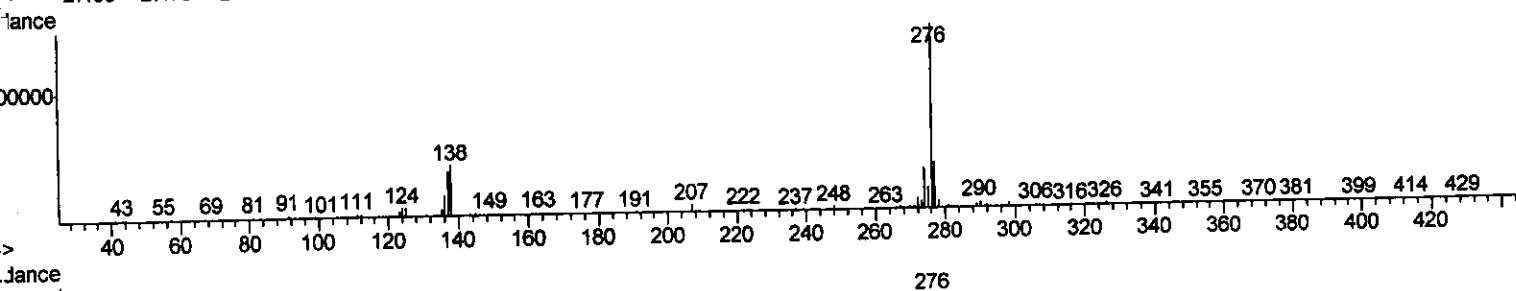
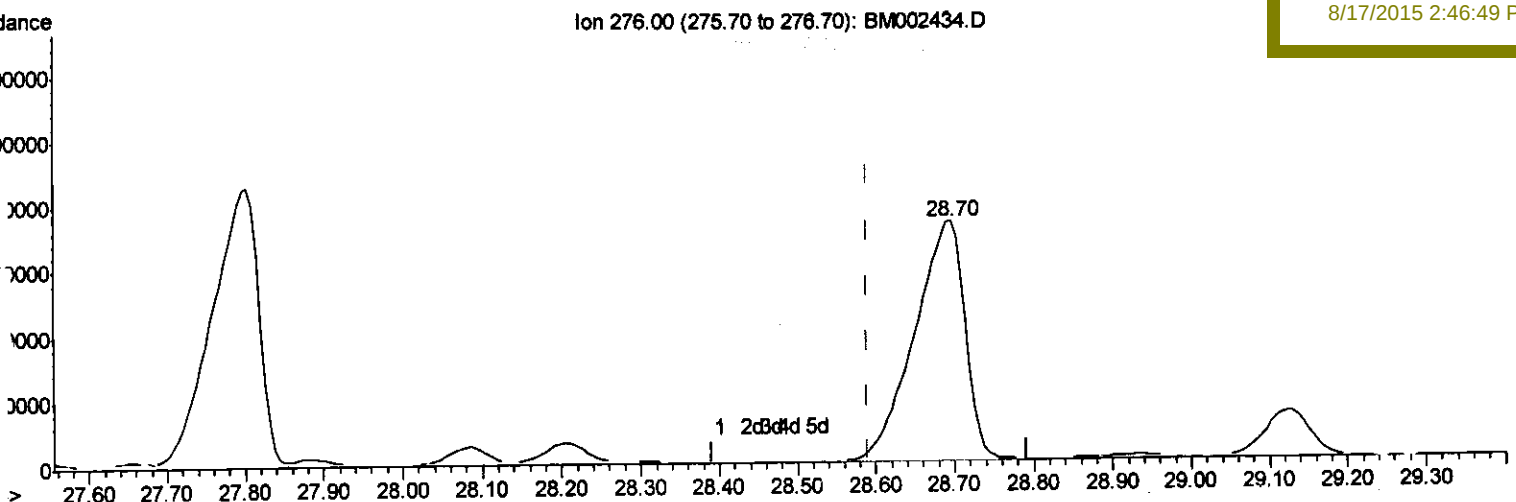
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002434.D
 Date On : 15 Aug 2015 20:50
 Operator : UM/IZ
 Sample : G3219-13MSD
 Disc :
 Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:00:22 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 Client Sample ID :
 D9DA4MSD

Manual Integration
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 8/17/2015 2:46:49 PM



(29) Benzo(g,h,i)perylene

28.697min (+0.106) 123.88ng/ul m

response 3288319

U.M.
 08/18/15

Ion	Exp%	Act%
276.00	100	100
138.00	26.30	27.34
277.00	24.00	24.41
0.00	0.00	0.00

ata Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 ata File : BM002434.D
 ca On : 15 Aug 2015 20:50
 perator : UM/IZ
 ample : G3219-13MSD
 isc :
 LS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 06:04:33 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 Last Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MSD

Manual Integrations
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 8/17/2015 2:46:49 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.87	152	152037	20.00	ng/ul	0.00
2) Naphthalene-d8	11.74	136	715896	20.00	ng/ul	0.00
6) Acenaphthene-d10	15.45	164	372164	20.00	ng/ul	0.00
12) Phenanthrene-d10	18.16	188	675965	20.00	ng/ul	0.00
17) Chrysene-d12	22.24	240	435964	20.00	ng/ul	0.01
22) Perylene-d12	24.92	264	480208m	20.00	ng/ul	0.02
System Monitoring Compounds						
7) Acenaphthylene-d8	15.16	160	1029607	27.06	ng/ul	0.00
10) Fluorene-d10	16.43	176	672668	25.17	ng/ul	0.00
14) Anthracene-d10	18.26	188	864310	26.51	ng/ul	0.00
18) Pyrene-d10	20.47	212	668712	34.60	ng/ul	0.00
25) Benzo(a)pyrene-d12	24.75	264	576576m	22.86	ng/ul	0.03
Target Compounds						
3) Naphthalene	11.79	128	39630	1.08	ng/ul	97
4) 2-Methylnaphthalene	13.33	142	29999	1.10	ng/ul	96
9) Acenaphthene	15.52	153	705841	26.91	ng/ul	100
13) Phenanthrene	18.20	178	508068	13.02	ng/ul	100
15) Anthracene	18.29	178	102051	2.58	ng/ul	99
16) Fluoranthene	20.15	202	1877291	42.48	ng/ul	99
19) Pyrene	20.51	202	2639908	103.36	ng/ul	100
20) Benzo(a)anthracene	22.23	228	2161980	82.93	ng/ul	98
21) Chrysene	22.29	228	2746077	112.62	ng/ul	97
23) Benzo(b)fluoranthene	24.11	252	5762241m	198.49	ng/ul	
24) Benzo(k)fluoranthene	24.15	252	1896786m	68.95	ng/ul	
26) Benzo(a)pyrene	24.82	252	3748033m	135.17	ng/ul	
27) Indeno(1,2,3-cd)pyrene	27.80	276	3566856m	111.85	ng/ul	
28) Dibenzo(a,h)anthracene	27.79	278	1217305m	45.67	ng/ul	
29) Benzo(a,h,i)perylene	28.70	276	3288319m	123.88	ng/ul	

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 08/18/15

(#) = qualifier out of range (m) = manual integration (+) = signals summed